SOPC 00233

TENNESSEE DEPARTMENT OF AGRICULTURE

Water Resources Program

The following individual has submitted all required elements of an NMP/CNMP as required to obtain a CAFO permit. Their Nutrient Management Plan (or CNMP) has been reviewed and approved by this office.

Name of Owner/Operator: Ray Lovett

Operation Name: Ray Lovett Poultry

Address of Operation: 648 Stan Gap Rd. Ocoee, TN 37363

Phone Number: (423) 338-8291 County: Polk

Date application was initiated:

RECEIVED
MAR 28 2012

Date approval forwarded to TDEC:

APR 12 2012

NMP/CNMP Approval Date:

THE APPROVAL SHALL NOT BE CONSTRUED AS CREATING A PRESUMPTION OF CORRECT

APR 12 2012

OPERATION OR AS WARRANTING THAT THE APPROVED FACILITIES WILL REACH THE DESIGNED GOALS

Date approval received by TDEC

RECEIVED
APR 16 2012
TN Division Of Water Pollution Control

TDA Reviewer's Name: Angela Warden

TDA Reviewer's Signature: _____ 4/12/12

Date

TENNESSEE DEPARTMENT OF AGRICULTURE
Water Resources Program

April 12, 2012

Ms. Erin O'Brien
TDEC
L&C Annex, 6th Floor
Nashville, Tennessee 37243

Dear Ms. O'Brien:

I am writing to inform you that the Tennessee Department of Agriculture (TDA) has reviewed the application and Comprehensive Nutrient Management Plan (CNMP) for CAFO permit for Mr. Ray Cavett, in Ocoee, Tennessee.

This letter is to confirm that the TDA has reviewed and approved the CNMP. I have enclosed a copy of the Nutrient Management Plan Requirements form and the signed and dated Notice of Intent (NOI) form, Addendum to Nutrient Management Plan, Closure Plan, CNMP, and stamped Approval Stamp form for your review and final approval.

Sincerely,

Angela L. Warden
CAFO Specialist

: //enclosures

ec:// Mr. John Donaldson, Technical Service Provider

Ellington Agricultural Center
440 Hogan Road
Nashville, TN 37220
Telephone: 615-837-5492 Fax: 615-837-5025

3/29/11

Nutrient Management Plan Requirements

The following 9 items need to be submitted at the time the permit is applied for. Additional record-keeping items as outlined in the CAFO rules are also considered part of the nutrient management plan and must be kept on-site. More information on each item can be found in the CAFO rule (1200-4-5-.14).

1. **Two maps: (1.)** A map of your farm showing location of any animal barns/houses, compost bins, litter storage bins, manure lagoons/holding ponds, nearby roads, fields to which litter/manure will be applied, and non-application buffer areas around any bodies of water (streams, creeks, rivers, ponds, wells, sinkholes, springs, wetlands, etc.). A hand-drawn map is acceptable and even preferred. **(2.)** A topographic map of the farm (1:24000 scale, showing 1-mile radius from farm) showing property lines.
2. **Nutrient budget** – this is basically a balance sheet of all manure produced on the farm and all manure spread on the farm or removed from the farm. Application rates for all fields should be based on crop needs, realistic crop yield expectations, and actual manure analyses of nutrient content.
3. **Soil test results** for phosphorus and potassium for each application field. These must be taken at a minimum of every five years.
4. Results of **manure analysis** from within the past year. Annual manure testing is a requirement for all CAFOs. These results must be included with initial permit application if the farm is in operation. If the farm that is applying for the permit is new and not yet operating, then manure testing results need to be obtained once operation begins. At that point, the manure test results and revised application rates need to be submitted to TDA. Manure test results in subsequent years need to be kept as part of your record-keeping activities.
5. Results of the **Phosphorus Index** applied to each field that has a soil test P value of "High" or "Very High". In those situations, this tool will determine whether your application rates will be based on nitrogen or phosphorus.
6. Statement regarding method of **dead animal disposal**.
7. **Closure Plan** to be implemented in the event animal production ceases on the site.

These last two items are only required for medium-size CAFOs that manage **liquid manure**.

8. Documentation of **design of liquid waste handling system**. This should include, but is not limited to: volume for solids accumulation, design treatment volume, total design volume, the approximate number of days of storage capacity, pumping and routing of wastes, and any solid separation process. Ideally, this documentation would consist of the pertinent engineering drawings with accompanying descriptive narrative.
9. The construction, modification, repair, or installation of any portion of a CAFO liquid waste handling system (such as earthen holding pond, treatment lagoon, pit, sump or other earthen storage/containment structure) after April 13, 2006 must be preceded by a thorough **subsurface investigation**. This investigation will include a detailed soils investigation with special attention to the water table depth and seepage potential.

In addition to the items above, the following form(s) must accompany your application:

- ***Notice of Intent* form** must be submitted with all applications from Class II (Medium) CAFOs

OR

- **EPA Forms 1 and 2B** must be submitted with all applications from Class I (Large) CAFOs.
- **Addendum to Nutrient Management Plan**.

#42

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street, 6th Floor L & C Annex, Nashville, TN 37243
(615) 532-0625

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)
STATE OPERATING PERMIT (SOP)
NOTICE OF INTENET (NOI)

Type of permit you are requesting: ☐ SOPCD0000 (designed to discharge) ☑ SOPC00000 (no discharge) ☐ Unknown, please advise

Application type: ☐ New Permit ☐ Permit Reissuance ☐ Permit Modification

If this NOI is submitted for Permit Modification or Reissuance provide the existing permit tracking number: ____

OPERATION IDENTIFICATION

Operation Name: Ray Cavett Poultry	County: Polk
Operation Location/ Physical Address: 648 Sloan Gap Road Ocoee, TN 37361	Latitude: 35° 6' 12.37"N Longitude: 84° 42' 45.17"W
Name and distance to nearest receiving water(s): Lowery Branch 170 feet	
If any other State or Federal Water/Wastewater Permits have been obtained for this site, list those permit numbers:	
Animal Type: ☑ Poultry ☐ Swine ☐ Dairy ☐ Beef ☐ Other ____	
Number of Animals: 84000 / Number of Barns: 2 (40' x 500') / Name of Integrator: Pilgrim's Pride	
Type of Animal Waste Management: ☑ Dry ☐ Liquid ☐ Liquid, Closed System (i.e. covered tank, under barn pit, etc.)	
Attach the NMP ☑ NMP Attached / Attach the closure plan ☑ Closure Plan Attached / Attach a topographic map ☑ Map Attached	

PERMITTEE IDENTIFICATION

Official Contact (applicant): Ray Cavett	Title or Position: Landowner			
Mailing Address: PO BOX 28	City: Ocoee	State: TN	Zip: 37361	☑ Correspondence ☐ Invoice
Phone number(s): (423) 338-5294	E-mail:			
Optional Contact:	Title or Position:			
Address:	City:	State:	Zip:	☐ Correspondence ☐ Invoice
Phone number(s):	E-mail:			

APPLICATION CERTIFICATION AND SIGNATURE (must be signed in accordance with the requirements of Rule 1200-4-5-.05)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and title; print or type	Signature	Date
Ray Cavett	Ray Cavett	3-27-2012

STATE USE ONLY

Received Date	Reviewer	RFO	T & E Aquatic Fauna	Tracking No.
APR 2 2012	Impaired Receiving Stream	High Quality Water		NPDES No.

RECEIVED

RECEIVED
MAR 28 2012
EPA 2366

Addendum to Nutrient Management Plan:

By my signature below, I affirm that I have read, understand, and will comply with the following stipulations from Tennessee's CAFO rule (1200-4-5-.14) that apply to my CAFO operation.

1) All clean water (including rainfall) is diverted, as appropriate, from the production area.
2) All animals in confinement are prevented from coming in direct contact with waters of the state.
3) All chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
4) All sampling of soil and manure/litter is conducted according to protocols developed by UT Extension.
5) All records outlined in 1200-4-5-.14(16)d-f will be maintained and available on-site.
6) Any confinement buildings, waste/wastewater handling or treatment systems, lagoons, holding ponds, and any other agricultural waste containment/treatment structures constructed after April 13, 2006 are or will be located in accordance with NRCS Conservation Practice Standard 313.
7) Drystacks of manure or stockpiles of litter are always kept covered under roof or tarps.
8) An *Annual Report* will be written for my operation and submitted between January 1 and February 15 of each year. It will include all information required by rule [1200-4-5-.14(16)g].

Ray Cavett
Signature of CAFO Operator:

4-3-2012
Date:

ETC ENVIRONMENTAL TESTING & CONSULTING, INC.
www.etcmemphis.com
2790 Whitten Road Memphis, Tennessee 38133 (901) 213-2400 Fax (901) 213-2440

LAND APPLICATION ANALYSIS

Client :
Mr. John Donaldson

107 Donaldson Ave

Celina , TN 38551

Grower :
Ray Cavett

PO :

Report No: 10-258-0287
Cust No: 01560
Date Printed: 09/22/2010
Date Recd : 9/15/2010

Lab Number : 81981 **Sample Id :** 1

Test	Analysis		Pounds Per Ton	
	As Received	Dry Basis	As Received	Dry Basis
Nitrogen, N %	0.212	0.259	4.24	5.19
Ammoniacal-N				
Phosphorus, P %	0.99	1.21	45.5 P_2O_5	55.7
Potassium, K %	1.68	2.05	40.3 K_2O	49.4
Sulfur, S				
Magnesium, Mg				
Calcium, Ca				
Sodium, Na				
Iron, Fe				
Aluminum, Al				
Manganese, Mn				
Copper, Cu				
Zinc, Zn				
Boron, B				

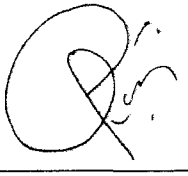
Test	Result
Moisture %	18.3
Solid %	81.7

Additional Information	Result
Type	Dry Basis

Comments :

RMMA Recommended Methods of Manure Analysis, Peters et al, 2002, In Press

SW USEPA, SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, 3rd Ed. Current Revision



Oscar Ruiz

Comprehensive Nutrient Management Plan

The Comprehensive Nutrient Management Plan (CNMP) is an important part of the conservation management system (CMS) for your Animal Feeding Operation (AFO). This CNMP documents the planning decisions and operation and maintenance for the animal feeding operation. It includes background information and provides guidance, reference information and Web-based sites where up-to-date information can be obtained. Refer to the Producer Activity document for information about day-to-day management activities and recordkeeping. Both this document and the Producer Activity document shall remain in the possession of the producer/landowner.

Farm contact information: Ray Cavett
c/o
PO Box 28
Ocoee, TN 37361
423-716-2490

Latitude/Longitude: 35°6'12.37"N 84°42'45.17"W

Plan Period: Feb 2011 - Jan 2016

Conservation Planner

As a Conservation Planner, I certify that I have reviewed both the *Comprehensive Nutrient Management Plan* and *Producer Nutrient Management Activities* documents for technical adequacy and that the elements of the documents are technically compatible, reasonable and can be implemented.

Signature: _____ Date: 3-20-2012
Name:
Title: Certification Credentials:

Owner/Operator

As the owner/operator of this CNMP, I, as the decision maker, have been involved in the planning process and agree that the items/practices listed in each element of the CNMP are needed. I understand that I am responsible for keeping all the necessary records associated with the implementation of this CNMP. It is my intention to implement/accomplish this CNMP in a timely manner as described in the plan.

Signature: Ray Cavett Date: 3-20-2012
Name:

Section 2. Manure and Wastewater Handling and Storage

Signature: _____ Date: 3-3-11
Name:
Title: Certification Credentials:

Sections 4. Land Treatment

Signature: _____ Date: 3-3-11
Name:
Title: Certification Credentials:

Section 6. Nutrient Management

The Nutrient Management component of this plan meets the Tennessee Nutrient Management 590 and Waste Utilization 633 Conservation Practice Standards.

Signature: _____ Date: 3-3-11
Name:
Title: Certification Credentials:

:

Table of Contents

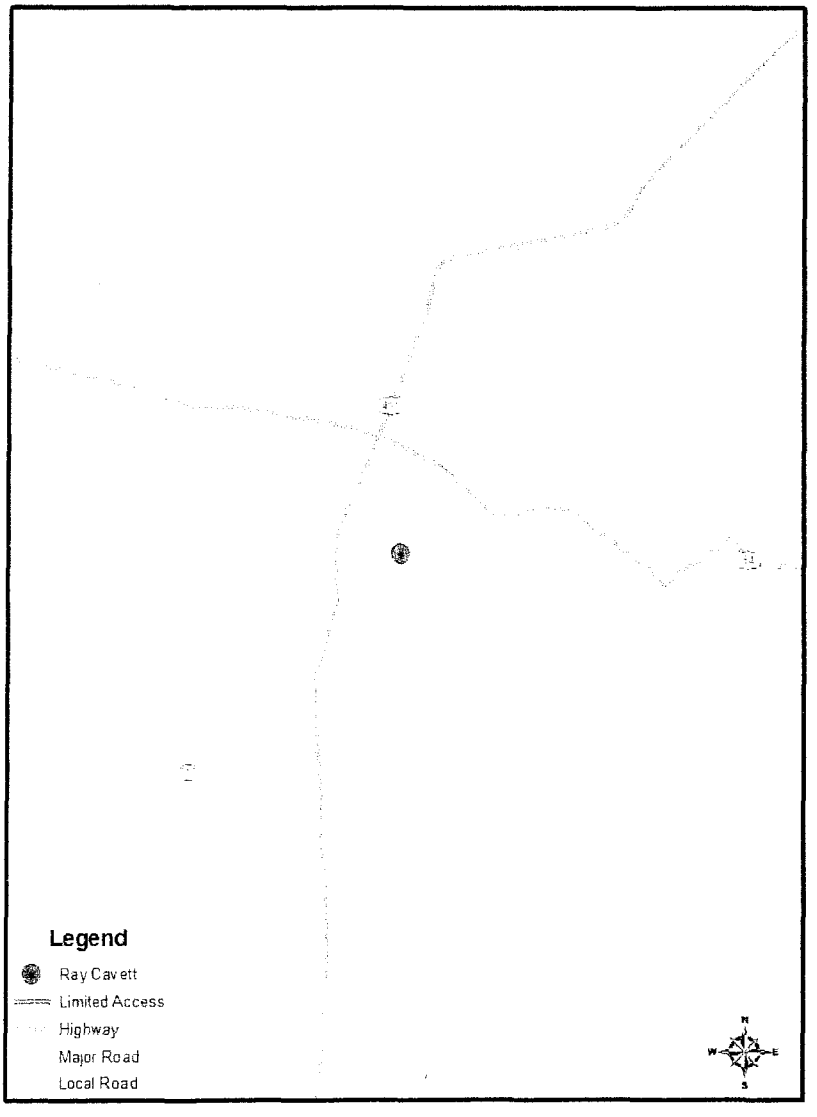
1.1. General Description of Operation

A Comprehensive Nutrient Management Plan (CNMP) is a conservation plan that is unique to animal feeding operations. This CNMP incorporates conservation practices and management activities which, when combined into a system, will help ensure that both agriculture production goals and natural resources protection goals are achieved. This CNMP addresses natural resource concerns dealing with soil erosion, manure, and organic byproducts, and their potential impacts on water quality, which may derive from an animal feeding operation (AFO). This CNMP is developed to assist an AFO owner/operator in meeting all applicable management activities and conservation practices which may be required to meet local, tribal, State, or Federal water quality goals, or regulations.

County Polk
State Tennessee

Ray Cavett Location

Date. 2/12/2011



Lat/Long 35° 6' 12.37"N 84° 12' 45.17"W
Validus

0 6,250 12,500 25,000 Feet

1.1. General Description of Operation

Ray Cavett operates a broiler operation located in Polk, County Tennessee. The operation consists of two houses (40'x500'), each containing 29,500 birds. The operation runs 6 flocks each year. Cake is transferred from the houses to a stacking shed between flocks. All litter is exported off site from the stacking shed and the houses in October.

1.2. *Sampling, Calibration and Other Statements*

Manure sampling frequency
Manure samples will be taken prior to export.

Critical Use Areas:
All disturbed areas, including slopes of pads, will be planted to permanent vegetation. If construction is during seasons not suited for planting warm or cool season grasses, temporary vegetation will be established until the recommended planting dates. Refer to Application and Maintenance of Conservation Practices and specifically NRCS practice standard 342, Critical Area Treatment, for guidance.

All conservation practices and management activities planned and implemented as part of this CNMP should meet NRCS technical standards. For those elements, for which NRCS does not maintain technical standards, the criteria established by Land Grant Universities, industry, or other technically qualified entities will be met.

Veterinary Waste Management
All veterinary waste will be either disposed of through an approved land fill and sharps containers or by the attending veterinarian.

Revision Trigger
This nutrient management plan shall be reviewed when the results of soil tests are received to insure manure application rates are appropriate. This plan must be re-certified at least every five year. Modifications of the CNMP will require re-certification whenever there are substantial changes made to the animal or crop operations. Substantial changes are defined as a change in crop sequence that would not allow allocation of the nutrients using Manure Management Planner (MMP) or equivalent method, change in manure application area size greater than 15% or change in livestock numbers by greater than 10%.

CNMP Lifespan
This nutrient management plan shall be reviewed when the results of soil tests are received to insure manure application rates are appropriate. This plan must be re-certified at least every five years. Updates of this CNMP will require re-certification whenever there are substantial changes made to the animal or crop operations. This plan will be amended when required by the permit.

1.3. Resource Concerns

If checked, the indicated resource concerns have been identified and have been addressed in this plan.

Soil Quality Concerns

	Soil Quality Concern	*Fields*
A	Gully Erosion	Production Area
B	Sheet and Rill Erosion	Production Area

A and B----Erosion around travel lanes and around construction areas is a concern. As long as these areas are maintained in properly managed vegetation and potential gully erosion is monitored and adequately addressed in a timely manner, erosion concerns are adequately addressed.

Water Quality Concerns

	Water Quality Concern	*Fields*
A	Facility Wastewater Runoff	Production Area
C	Manure Runoff (From Facilities)	Production Area
D	Nutrients in Groundwater	Production Area
E	Nutrients in Surface Water	Production Area

Water Quality concerns will be addressed by the following practices:
A, C, D and E---Will be addressed with the properly managed use of a Dry Stack and manure transfer.

Other Concerns Addressed

	Other Concern	*Fields*
A	Aesthetics	Production Area
X	Neighbor Relations	Production Area
X	Profitability	Operation
X	Regulations	Operation

A ---Will be addressed with maintenance and proper operation. Following this plan will improve all other resource concerns.

Section 2. Manure and Wastewater Handling and Storage

This element addresses the components and activities, existing and planned, associated with the production facility, feedlot, manure and wastewater storage, treatment structures and areas, and any area used to facilitate transfer of manure and wastewater.

Ray Cavett operates a broiler operation located in Polk, County Tennessee. The operation consists of two houses (40'x500'), each containing 29,500 birds. The operation runs 6 flocks each year. Cake is transferred from the houses to a stacking shed between flocks. All litter is exported off site from the stacking shed and the houses in October.

All litter will be transfer to the trucks with a loader, truck, or some method of hauling and dumping. All buildings will be totally cleaned out annually. Total cleanouts will be conducted when birds are removed and all litter will be exported.All spilled litter at the front of houses will be cleaned up once cleanout is complete.

2.1. Map(s) of Production Area

County: Bradley

State: Tennessee

Ray Cavett Production Site

Date: 2/12/2011

Lat/Long 35° 6' 12.37"N 84° 42' 45.17"W

Validus

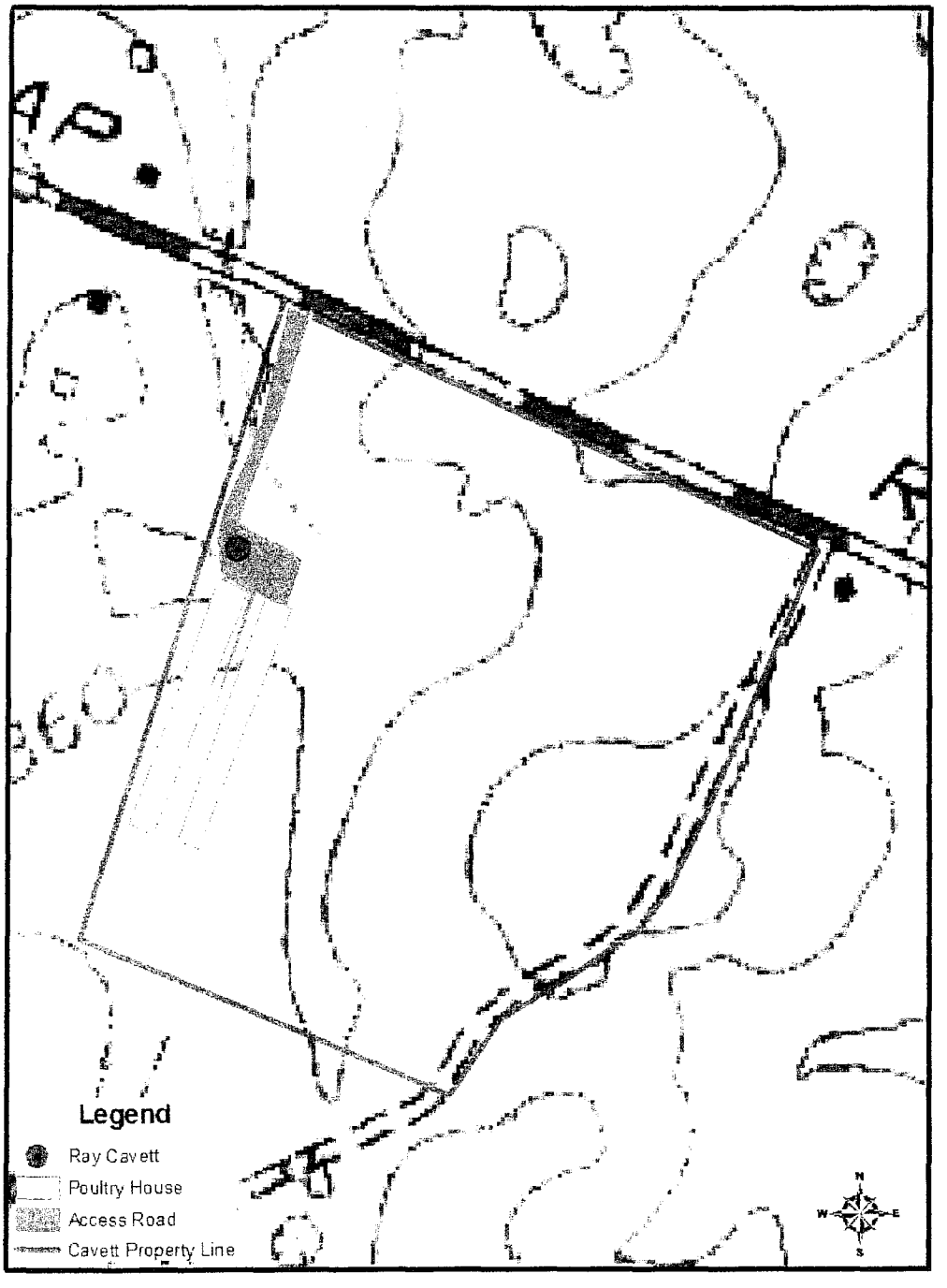
0 275 550 1,100 Fe

County: Polk

State: Tennessee

Ray Cavett Topo

Date: 2/12/2011



Lat /Long: 35° 6' 12.37"N/ 84°42'45.17"W

Validus

0 195 390 780 Feet

2.2. Production Area Conservation Practices

Waste Storage Facility (313) –Roofed Storage Facilities

Install a roofed facility to store liquid and/or solid waste on a temporary basis. Roofed structures may include covers on feedlots and poultry cake storage facilities. See the waste storage facility engineering plan for construction specifications and maintenance.

Tract/Field	Planned Amount (No)	Month	Year	Amount Applied	Date
Production Area	1	7	2012		
Total	**1**				

Mulching (484)

Mulch disturbed area with 2 tons (approximately 90 lbs/1000 square feet) of evenly distributed hay so that approximately 70 percent of the surface is covered.

Tract/Field	Planned amount (Ac)	Month	Year	Amount Applied	Date
Production Area	3	7	2012		
Total	**3**				

Roof Runoff (558)

Collect and remove roof runoff from within a contaminated waste stream.

Tract/Field	Planned amount (No)	Month	Year	Amount Applied	Date
Production Area	1	7	2012		
Production Area				2	Prior
Total	**1**			2	

Animal Mortality Management (316)

Normal mortalities will be composted while catastrophic mortalities will be placed in an approved landfill. Collect dead birds daily and place in compost area, refer to Mortality Management Information in the Operation and Maintenance Section in this document.

Tract/Field	Planned amount (No)	Month	Year	Amount Applied	Date
Production Area	1	4	2012		
Total	**1**				

2.3. Manure Storage

Storage ID	Type of Storage	Pumpable or Spreadable Capacity	Annual Manure Collected	Maximum Days of Storage
House 1	In-house litter storage	300 Tons	185 Tons	592
House 2	In-house litter storage	300 Tons	185 Tons	592
Dry Stack	Poultry manure dry stack	90 Tons	0 Tons	

2.4. Animal Inventory

Animal Group	Type or Production Phase	Number of Animals	Average Weight (Lbs)	Confinement Period	Manure Collected (%)	Storage Where Manure Will Be Stored
House 1	Broiler	29,500	2.1	Jan Early - Dec Late	100	House 1
House 2	Broiler	29,500	2.1	Jan Early - Dec Late	100	House 2

(1) Number of Animals is the average number of animals that are present in the production facility at any one time.
(2) If Manure Collected is less than 100%, this indicates that the animals spend a portion of the day outside of the production facility or that the production facility is unoccupied one or more times during the confinement period.

and weed seeds.

Good carcass compost should heat up to the 140° range within a few days. Failure of the compost material to heat up properly normally results from two causes. First, the nitrogen source is inadequate (example wet or leached litter). A pound of commercial fertilizer spread over a carcass layer will usually solve this problem. Secondly, the compost fails when too much water has been added and the compost pile becomes anaerobic. An anaerobic compost bin is characterized by temperatures less than 120°, offensive odors, and black oozing compound flowing from the bottom of the compost bin. In this case a drier bulking / carbon amendment should be added to dry the mix. Then, the material should be remixed and composted.

It is possible, though unlikely, for the temperature to rise above the normal range and create conditions suitable for spontaneous combustion. If temperature rises above 170° F, the material should be removed from the bin and cooled, spread on the ground to a depth not to exceed six inches in an area away from buildings. Water should be added only if flames occur. If temperature falls significantly during the composting period and odors develop, or if material does not reach operating temperature, investigate piles for moisture content, porosity, and thoroughness of mixing.

After this first stage process, the material should be turned into a second bin and allowed to go through a second heat process. For larger birds, especially turkeys, a third turning may be necessary for complete degradation of the birds. Typically, the process can be considered "done" within 21-28 days from the time the compost is filled for broilers. For turkeys, the process usually requires about 60 days. After the heat process, curing period of one to three months is usually required before the material is stable.

Compost may be land applied after the secondary or tertiary composting. If any animal parts are still in the mix, the material must be incorporated. If immediate application is not possible the material should be stored using the same requirements as that of stored litter in the Stacking Shed O&M statement.

Inspect compost structure at least twice annually when the structure is empty. Replace any broken or badly worn parts or hardware. Patch concrete floors and curbs as necessary to assure water tightness. Examine roof structures for structural integrity and leaks. Inspections shall be documented on the attached worksheet.

The primary and secondary composters and the litter storage area should be protected from outside sources of water such as rain or surface runoff.

In order to assure desired operation of the composting facility, daily records should be kept during the first several compost batches. This can be helpful in identifying certain problems that may occur.

2.6. Planned Manure Exports off the Farm

Month-Year	Manure Source	Amount	Receiving Operation	Location
Mar 2011	Dry Stack	90 Tons	External Operation	
Sep 2011	Dry Stack	90 Tons	External Operation	
Oct 2011	House 1	85 Tons	External Operation	
Oct 2011	House 2	85 Tons	External Operation	
Mar 2012	Dry Stack	90 Tons	External Operation	
Sep 2012	Dry Stack	90 Tons	External Operation	
Oct 2012	House 1	96 Tons	External Operation	
Oct 2012	House 2	96 Tons	External Operation	
Mar 2013	Dry Stack	90 Tons	External Operation	
Sep 2013	Dry Stack	90 Tons	External Operation	
Oct 2013	House 1	96 Tons	External Operation	
Oct 2013	House 2	96 Tons	External Operation	
Mar 2014	Dry Stack	90 Tons	External Operation	
Sep 2014	Dry Stack	90 Tons	External Operation	
Oct 2014	House 1	96 Tons	External Operation	
Oct 2014	House 2	96 Tons	External Operation	
Mar 2015	Dry Stack	90 Tons	External Operation	
Sep 2015	Dry Stack	90 Tons	External Operation	
Oct 2015	House 1	96 Tons	External Operation	
Oct 2015	House 2	96 Tons	External Operation	

2.7. Planned Manure Imports onto the Farm

Month-Year	Manure's Animal Type	Amount	Originating Operation	Location

(None)

2.8. Planned Internal Transfers of Manure

Month-Year	Manure Source	Amount	Manure Destination
Feb 2011	House 1	15 Tons	Dry Stack
Feb 2011	House 2	15 Tons	Dry Stack
Apr 2011	House 1	15 Tons	Dry Stack
Apr 2011	House 2	15 Tons	Dry Stack
Jun 2011	House 1	15 Tons	Dry Stack
Jun 2011	House 2	15 Tons	Dry Stack
Aug 2011	House 1	15 Tons	Dry Stack
Aug 2011	House 2	15 Tons	Dry Stack
Oct 2011	House 1	15 Tons	Dry Stack
Oct 2011	House 2	15 Tons	Dry Stack
Dec 2011	House 1	15 Tons	Dry Stack

Month-Year	Manure Source	Amount	Manure Destination
Dec 2011	House 2	15 Tons	Dry Stack
Feb 2012	House 1	15 Tons	Dry Stack
Feb 2012	House 2	15 Tons	Dry Stack
Apr 2012	House 1	15 Tons	Dry Stack
Apr 2012	House 2	15 Tons	Dry Stack
Jun 2012	House 1	15 Tons	Dry Stack
Jun 2012	House 2	15 Tons	Dry Stack
Aug 2012	House 1	15 Tons	Dry Stack
Aug 2012	House 2	15 Tons	Dry Stack
Oct 2012	House 1	15 Tons	Dry Stack
Oct 2012	House 2	15 Tons	Dry Stack
Dec 2012	House 1	15 Tons	Dry Stack
Dec 2012	House 2	15 Tons	Dry Stack
Feb 2013	House 1	15 Tons	Dry Stack
Feb 2013	House 2	15 Tons	Dry Stack
Apr 2013	House 1	15 Tons	Dry Stack
Apr 2013	House 2	15 Tons	Dry Stack
Jun 2013	House 1	15 Tons	Dry Stack
Jun 2013	House 2	15 Tons	Dry Stack
Aug 2013	House 1	15 Tons	Dry Stack
Aug 2013	House 2	15 Tons	Dry Stack
Oct 2013	House 1	15 Tons	Dry Stack
Oct 2013	House 2	15 Tons	Dry Stack
Dec 2013	House 1	15 Tons	Dry Stack
Dec 2013	House 2	15 Tons	Dry Stack
Feb 2014	House 1	15 Tons	Dry Stack
Feb 2014	House 2	15 Tons	Dry Stack
Apr 2014	House 1	15 Tons	Dry Stack
Apr 2014	House 2	15 Tons	Dry Stack
Jun 2014	House 1	15 Tons	Dry Stack
Jun 2014	House 2	15 Tons	Dry Stack
Aug 2014	House 1	15 Tons	Dry Stack
Aug 2014	House 2	15 Tons	Dry Stack
Oct 2014	House 1	15 Tons	Dry Stack
Oct 2014	House 2	15 Tons	Dry Stack
Dec 2014	House 1	15 Tons	Dry Stack
Dec 2014	House 2	15 Tons	Dry Stack
Feb 2015	House 1	15 Tons	Dry Stack
Feb 2015	House 2	15 Tons	Dry Stack
Apr 2015	House 1	15 Tons	Dry Stack
Apr 2015	House 2	15 Tons	Dry Stack
Jun 2015	House 1	15 Tons	Dry Stack
Jun 2015	House 2	15 Tons	Dry Stack

Month-Year	Manure Source	Amount	Manure Destination
Aug 2015	House 1	15 Tons	Dry Stack
Aug 2015	House 2	15 Tons	Dry Stack
Oct 2015	House 1	15 Tons	Dry Stack
Oct 2015	House 2	15 Tons	Dry Stack
Dec 2015	House 1	15 Tons	Dry Stack
Dec 2015	House 2	15 Tons	Dry Stack

3.1. Emergency Response Plan

In Case of an Emergency Storage Facility Spill, Leak or Failure

Implement the following first containment steps:

a. Stop all other activities to address the spill.
b. Stop the flow. For example, use skid loader or tractor with blade to contain or divert spill or leak.
c. Call for help and excavator if needed.
d. Complete the clean-up and repair the necessary components.
e. Assess the extent of the emergency and request additional help if needed.

In Case of an Emergency Spill, Leak or Failure during Transport or Land Application

Implement the following first containment steps:

a. Stop all other activities to address the spill and stop the flow.
b. Call for help if needed.
c. If the spill posed a hazard to local traffic, call for local traffic control assistance and clear the road and roadside of spilled material.
d. Contain the spill or runoff from entering surface waters using straw bales, saw dust, soil or other appropriate materials.
e. If flow is coming from a tile, plug the tile with a tile plug immediately.
f. Assess the extent of the emergency and request additional help if needed.

Emergency Contacts

Department / Agency	Phone Number
Fire	911
Rescue services	911
State veterinarian	615-781-5310
Sheriff or local police	911

Nearest available excavation equipment/supplies for responding to emergency

Equipment Type	Contact Person	Phone Number
Front End Loader	On-site (owned)	

Contacts to be made by the owner or operator within 24 hours

Organization	Phone Number
EPA Emergency Spill Hotline	1-888-891-8332
County Health Department	(423) 338-4533
Other State Emergency Agency	931-823-1465

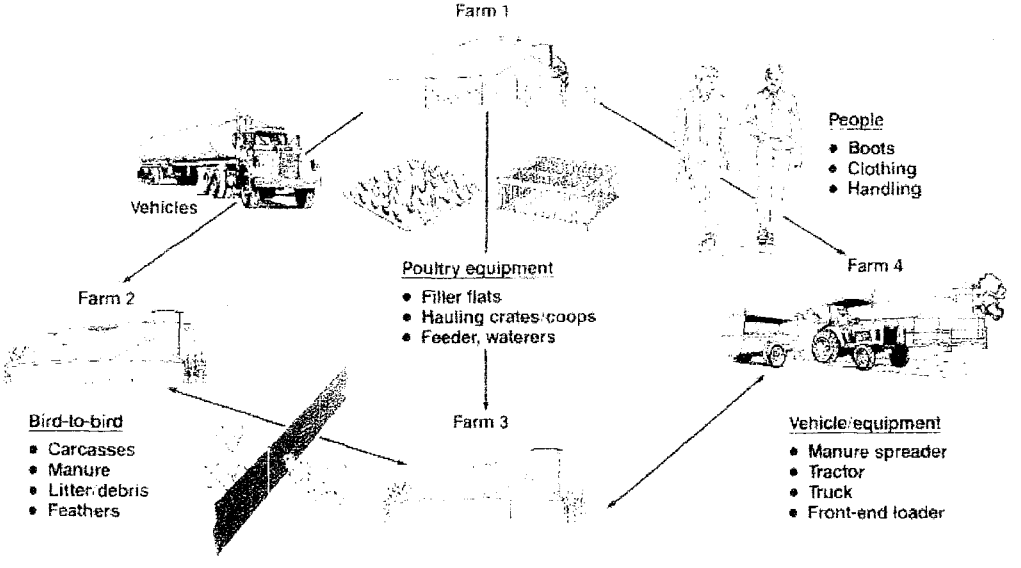
Be prepared to provide the following information:

a. Your name and contact information.
b. Farm location (driving directions) and other pertinent information.
c. Description of emergency.
d. Estimate of the amounts, area covered, and distance traveled.
e. Whether manure has reached surface waters or major field drains.
f. Whether there is any obvious damage: employee injury, fish kill, or property damage.
g. Current status of containment efforts.

3.2. Biosecurity Measures

Biosecurity is critical to protecting livestock and poultry operations. Visitors must contact and check in with the producer before entering the operation or any production or storage facility.

How Diseases Spread



Steps to Take to Avoid Disease Spread - Poultry

To reduce the risk of introducing disease into a flock, maintain a biosecurity barrier (physical barrier, personal hygiene, and equipment sanitation) between wildlife, poultry facilities, other commercial avian facilities, and pet birds. Some examples of good biosecurity practices include:

a. Permit only essential workers and vehicles on the premises.
b. Provide clean clothing and a disinfection procedure for employees and visitors. Know your visitor's travel history.
c. Clean and disinfect vehicles at the farm entrance.
d. Avoid visiting other avian facilities.
e. Do not keep pet birds.
f. Protect the flock from exposure to wild birds.
g. Control movement associated with the disposal of bird carcasses, litter, and manure.
h. Quarantine new additions to the flock. Never allow people or material to move from the quarantined birds to the flock.
i. Report signs of disease to your veterinarian.

3.3. Catastrophic Mortality Management

Refer to state guidance regarding appropriate catastrophic animal mortality handling methods.

Plan for Catastrophic Animal Mortality Handling

The following describes how you plan to manage catastrophic loss of animals in a manner that protects surface and ground water quality. You must follow all national, state and local laws, regulations and guidelines that protect soil, water, air, plants, animals and human health.

The Ray Cavett operation will use an approved landfill as the mortality disposal method for catastrophic mortalities. All mortalities will be collect upon discovery and taken to the landfill.

Important! In the event of catastrophic animal mortality, contact the following authority before beginning carcass disposal:

Authority name APHIS
Contact name Phillip Gordon
Phone number 615-781-5310

3.4. Chemical Handling

If checked, the indicated measures will be taken to prevent chemicals and other contaminants from contaminating process waste water or storm water storage and treatment systems.

	Measure
X	All chemicals are stored in proper containers. Expired chemicals and empty containers are properly disposed of in accordance with state and federal regulations. Pesticides and associated refuse are disposed of in accordance with the FIFRA label.
	Chemical storage areas are self-contained with no drains or other pathways that will allow spilled chemicals to exit the storage area.
X	Chemical storage areas are covered to prevent chemical contact with rain or snow.

Section 4. Land Treatment

This element addresses evaluation and implementation of appropriate conservation practices on sites proposed for land application of manure and organic byproducts from an Animal Feeding Operation. On fields where manure and organic byproducts are applied as beneficial nutrients, it is essential that runoff and soil erosion be minimized, to allow for plant uptake of these nutrients.

4.1. Map(s) of Fields and Conservation Practices

Not applicable, as all nutrients produced by this farm are exported to another operation to be land applied

5.1. Soil Information

Field	Map Unit	Soil Component Name	Surface Texture	Slope Range (%)	OM Range (%)	Bedrock Depth (in.)
Production Area	WbB2	Waynesboro	Loam	2-5%	2%	>60"
Production Area	WbC2	Waynesboro	Loam	12-25%	2%	>60"
Production Area	WT	Whitwell	Loam	0-3%	2%	>60"

Map Unit Description (Brief, Generated)

Polk County, Tennessee

[Minor map unit components are excluded from this report]

Map unit: WbB2 - Waynesboro loam, 2 to 5 percent slopes, eroded

Component: Waynesboro (90%)

The Waynesboro component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on stream terraces on river valleys. The parent material consists of clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map unit: WbC2 - Waynesboro loam, 5 to 12 percent slopes, eroded

Component: Waynesboro (90%)

The Waynesboro component makes up 90 percent of the map unit. Slopes are 5 to 12 percent. This component is on stream terraces on river valleys. The parent material consists of clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map unit: Wt - Whitwell loam, 0 to 3 percent slopes, occasionally flooded

Component: Whitwell (90%)

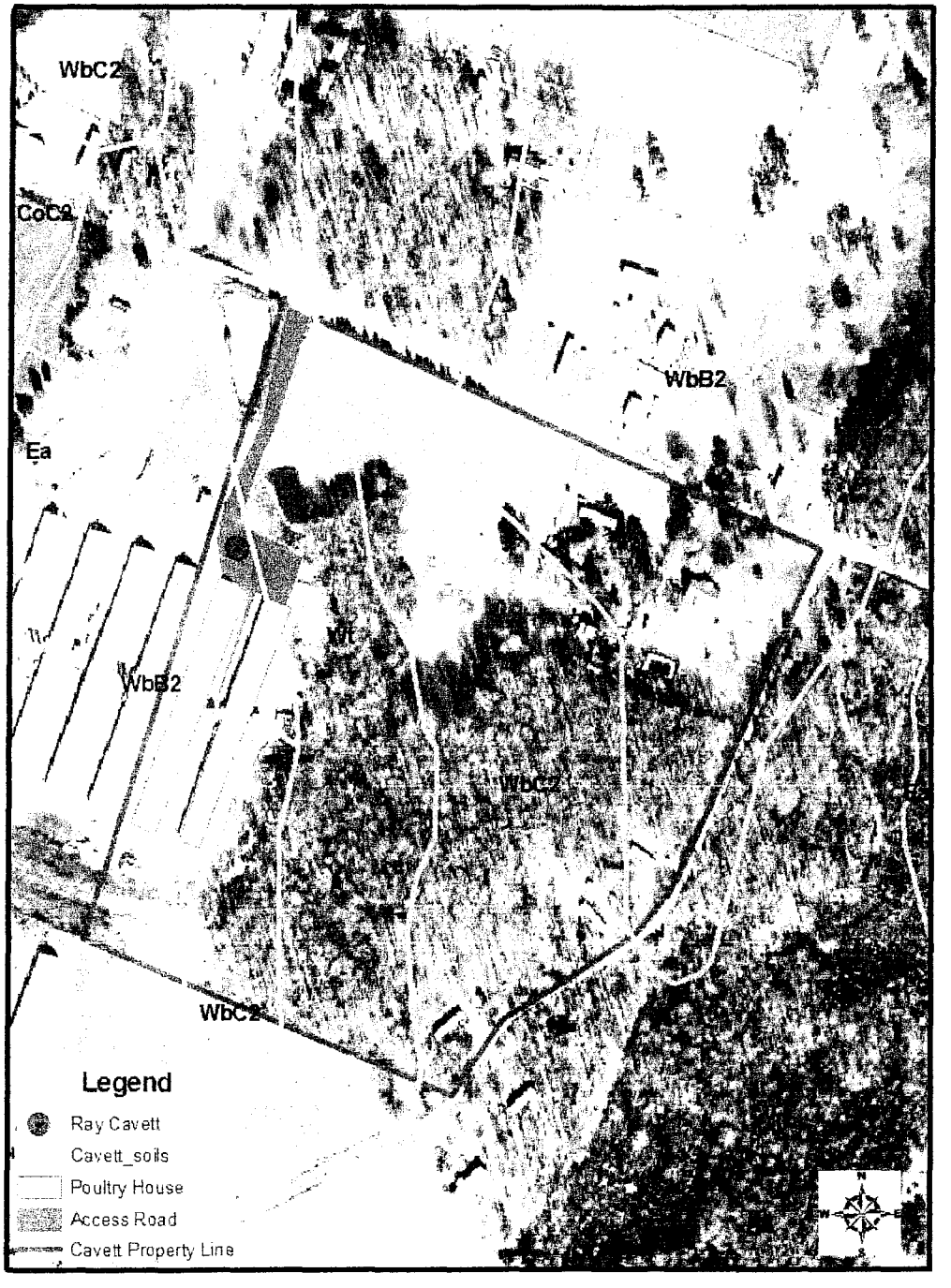
The Whitwell component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on stream terraces on river valleys. The parent material consists of loamy alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

County Polk

State Tennessee

Ray Cavett Soils

Date 2/12/2011



Lat-Long 35° 6'12.37"N/ 84°42'45.17"W

Validus

0 195 390 780 Feet

Section 6. Nutrient Management

The goal of this section is to develop a nutrient budget for nitrogen, phosphorus, and potassium that includes all nutrient sources. From this nutrient budget, projections will be made concerning the sustainability of the plan for the entire crop sequence. In most cases, the nutrient budget is accurate for the first year only. If nutrients from sources not included in this plan are used in the first year, the nutrient budget will be revised to account for those inputs. In subsequent years considered in this plan, a nutrient budget will be developed using current soil analysis data; current manure analysis data; the actual crops to be used and their projected yields and nutrient needs and will account for nutrients from all sources. Guidance in developing a nutrient budget may be obtained from your NRCS Field Office or your University of Tennessee Cooperative Extension Service Agent. Land application procedures must be planned and implemented in a way that minimizes potential adverse impacts to the environment and public health.

If land is included in the future for application that is not under the ownership/control of the producer, appropriate agreements will be obtained.

6.1. Manure Nutrient Analysis

Manure Source	Dry Matter (%)	Total N	NH_4-N	Total P_2O_5	Total K_2O	Avail. P_2O_5	Avail. K_2O	Units	Analysis Source and Date
House 1		4.24		45.5	40.3	45.5	40.3	Lb/Ton	A&L 81981
House 2		4.24		45.5	40.3	45.5	40.3	Lb/Ton	A&L 81981
Dry Stack								Lb/Ton	

(1) Entered analysis may be the average of several individual analyses.
(2) Tennessee assumes that 100% of manure phosphorus and 100% of manure potassium is crop available. First-year per-acre nitrogen availability for individual manure applications is given in the Planned Nutrient Applications table. For more information about nitrogen availability in Tennessee, see "Manure Application Management," Tables 3 and 4, Tennessee Extension, PB1510, 2/94 (http://wastemgmt.ag.utk.edu/ExtensionProjects/extension_publications.htm).

6.2. Manure Inventory Annual Summary

Manure Source	Plan Period	On Hand at Start of Period	Total Generated	Total Imported	Total Trans-ferred In	Total Applied	Total Exported	Total Trans-ferred Out	On Hand at End of Period	Units
House 1	Feb '11 - Jan '12	20	185	0	0	0	85	90	31	Ton
House 2	Feb '11 - Jan '12	20	185	0	0	0	85	90	31	Ton
Dry Stack	Feb '11 - Jan '12	60	0	0	180	0	180	0	60	Ton
All Sources	**Feb '11 - Jan '12**	**100**	**370**	**0**	**180**	**0**	**349**	**180**	**121**	**Ton**
House 1	Feb '12 - Jan '13	31	185	0	0	0	96	90	30	Ton
House 2	Feb '12 - Jan '13	31	185	0	0	0	96	90	30	Ton
Dry Stack	Feb '12 - Jan '13	60	0	0	180	0	180	0	60	Ton
All Sources	**Feb '12 - Jan '13**	**121**	**370**	**0**	**180**	**0**	**372**	**180**	**119**	**Ton**
House 1	Feb '13 - Jan '14	30	185	0	0	0	96	90	29	Ton
House 2	Feb '13 - Jan '14	30	185	0	0	0	96	90	29	Ton
Dry Stack	Feb '13 - Jan '14	60	0	0	180	0	180	0	60	Ton
All Sources	**Feb '13 - Jan '14**	**119**	**370**	**0**	**180**	**0**	**372**	**180**	**117**	**Ton**
House 1	Feb '14 - Jan '15	29	185	0	0	0	96	90	28	Ton
House 2	Feb '14 - Jan '15	29	185	0	0	0	96	90	28	Ton
Dry Stack	Feb '14 - Jan '15	60	0	0	180	0	180	0	60	Ton
All Sources	**Feb '14 - Jan '15**	**117**	**370**	**0**	**180**	**0**	**372**	**180**	**115**	**Ton**
House 1	Feb '15 - Jan '16	28	185	0	0	0	85	90	38	Ton
House 2	Feb '15 - Jan '16	28	185	0	0	0	85	90	38	Ton
Dry Stack	Feb '15 - Jan '16	60	0	0	180	0	180	0	60	Ton
All Sources	**Feb '15 - Jan '16**	**115**	**370**	**0**	**180**	**0**	**349**	**180**	**136**	**Ton**

Section 8. Other Utilization Options

All nutrients will be exported off the farm and used to support crop production. Therefore, Other Utilization Options are not incorporated into this CNMP.

Section 9. Actual Soil Test and Manure Analysis

To be added by producer.

Section 10. References

10.1. Publications

Animal Waste

AWMFH Chapter 4, Table 4-11(d), March 2008

Manure Application Setback Features/Distances

Nutrient Management Standard 590
http://efotg.nrcs.usda.gov/references/public/TN/Nutrient_Management_(590)_Standard.doc

TN DEQ Rule 1200-4-5-.14(17)(d)
http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-05.pdf

Phosphorus Assessment

"Tennessee Phosphorus Index," Tennessee NRCS, Nov. 2001

Practice Standards

Tennessee NRCS Nutrient Management Standard (590), Jan. 2003
http://efotg.nrcs.usda.gov/references/public/TN/Nutrient_Management_(590)_Standard.doc

10.2. Software and Data Sources

MMP Version	MMP 0.3.0.1
MMP Plan File	Cavett.mmp 2/14/2011 9:45:06 AM
MMP Initialization File for Tennessee	6/4/2009
MMP Soils File for Tennessee	9/8/2010
Phosphorus Assessment Tool	2009.02.20
NRCS Conservation Plan(s)	n/a
RUSLE2 Library	n/a
RUSLE2 Database	n/a

10.3. Operation and Maintenance

General

Operation and maintenance of structural and non-structural measures requires effort and expenditures throughout the life of the practice(s) to maintain safe conditions and assure proper functioning. Operation includes the administration, management, and performance of non-maintenance actions needed to keep a completed practice safe and functioning as planned. Maintenance includes work to prevent deterioration of practices, repairing damage, or replacement of the practice(s) if one or more components fail. Listed below is the operation and maintenance plan for the structural, non-structural, and land treatment measures for this operation.

Concrete in the buildings should be checked for signs of cracking. If cracks are discovered they must be repaired immediately. Hairline cracks are expected and should pose no problem.

Waste Storage Facility –Roofed Storage Facilities

Trusses/roof supports shall be examined during/after snowfall and high wind events. Excessive snow loads may require removal. Damage from high winds may cause structural damage to the truss/roof supports. Roof materials shall be replaced as wear/leakage occurs. Metal roofing may require periodic painting. Gutters and Downspouts shall be maintained.

Heavy Use Area Protection

This practice is applied every year to protect area(s) from soil erosion by maintaining vegetative cover around houses, barns, roads, etc. These areas will have pests controlled as needed and will be fertilized at maintenance levels for optimum growth.

Limit access to the area during poor soil / weather situations to protect the cover.
Inspect the heavy use area after significant storms and repair damaged areas as soon as practical.

Animal Mortality Management

Inspect the facility to note any maintenance needs or indicators of operation problems.

10.4. Closure Plan

In the event that Ray Cavett ceases production at this location, the following will be done within 360 days:

- Any litter currently in storage at the time of closure will be removed and spread on the farm or spread elsewhere according to my Nutrient Management Plan.
- All litter in houses will be removed and spread on the farm or spread elsewhere according to my Nutrient Management Plan.
- All land application of litter will be done at application rates calculated in the Nutrient Management Plan.
- The most current litter analysis will be provided to anyone removing litter from the farm.

Any dead birds in the houses at the time of closure will be incinerated or sent to render.